Non-Final Amendment filed on May 27, 2008

Page 2 of 17

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## Listing of Claims:

- 1. (Currently Amended) A radiation-sensitive resin composition comprising:
- (A) a resin which comprises from 5 to 90 mole percent of a recurring unit (1-1) shown by the following formula (I-1):

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid, and

(B) a photoacid generator,

wherein the resin does not comprise an aromatic ring.

Non-Final Amendment filed on May 27, 2008

Page 3 of 17

2. (Currently Amended) A radiation-sensitive resin composition comprising:

(A) a resin which comprises a recurring unit (1-1) shown by the following formula (1-1);

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, and a recurring unit (1-2) shown by the following formula (I-2):

$$CH_2$$
 $C$ 
 $R_{1b}$ 
 $C$ 
 $R_{1c}$ 
 $R_{1c}$ 
 $R_{1c}$ 

Non-Final Amendment filed on May 27, 2008

Page 4 of 17

wherein R<sub>1b</sub> represents a hydrogen atom or a methyl group, R<sub>1c</sub> individually represents a

monovalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative

thereof, or a linear or branched alkyl group having 1-4 carbon atoms, provided that (1) at

least one of the R<sub>1c</sub> groups is a monovalent alicyclic hydrocarbon group having 4-20

carbon atoms, or (2) any two of the R<sub>1c</sub> groups form, in combination and together with

the carbon atom with which these groups bond, a divalent alicyclic hydrocarbon group

having 4-20 carbon atoms or a derivative thereof, with the other R<sub>1c</sub> group being a

monovalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative

thereof, or a linear or branched alkyl group having 1-4 carbon atoms the resin being

insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an

acid, and

(B) a photoacid generator.

wherein the resin does not comprise an aromatic ring.

(Original) The radiation sensitive resin composition according to claim 2,

wherein the group -C(R $_{1c}$ ) $_3$  in the formula (I-2) is a 1-alkyl-1-cycloalkyl group, 2-alkyl-2-

 $adamantyl\ group,\ (1-alkyl-1-adamantyl) alkyl\ group,\ or\ (1-alkyl-1-norbornyl) alkyl\ group.$ 

4. (Original) The radiation-sensitive resin composition according to claim 1,

wherein the resin does not contain a lactone ring.

5. (Currently Amended) A radiation-sensitive resin composition comprising:

(A) a resin which comprises from 5 to 90 mole percent of a recurring unit (1-1)

shown by the following formula (I-1):

Non-Final Amendment filed on May 27, 2008

Page 5 of 17

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid, and

(B) a photoacid generator,

wherein the resin does not contain a lactone ring,

wherein the resin does not comprise an aromatic ring, and

wherein the content of the recurring unit (1-1) in the resin is 40-90 mol% in 100 mol% of the total recurring units forming the resin.

- 6. (Currently Amended) A radiation-sensitive resin composition comprising:
- (A) a resin which comprises a recurring unit (1-1) shown by the following formula (1-1):

Non-Final Amendment filed on May 27, 2008

Page 6 of 17

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, and a recurring unit (1-3) shown by the following formula (1-3):

$$+CH_2$$
 $+CH_2$ 
 $+CH_3$ 
 $+CH_3$ 
 $+CH_3$ 
 $+CH_3$ 

wherein  $R_{1b}$  represents a hydrogen atom or a methyl group, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid, and

(B) a photoacid generator,

Non-Final Amendment filed on May 27, 2008

Page 7 of 17

wherein the resin does not comprise an aromatic ring.

- 7. (Original) The radiation-sensitive resin composition according to claim 6, wherein the content of the recurring unit (1-1) in the resin is 5-25 mol% in 100 mol% of the total recurring units forming the resin.
  - 8. (Currently Amended) A radiation-sensitive resin composition comprising:
- (A) a resin which comprises a recurring unit (1-1) shown by the following formula (1-1):

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, and a recurring unit (1-4) shown by the following formula (1-4):

Non-Final Amendment filed on May 27, 2008

Page 8 of 17

wherein  $R_{1b}$  represents a hydrogen atom or a methyl group, A represents a linear or branched alkyl or alkylene group having 1-4 carbon atoms or a monovalent or divalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative thereof, and n is an integer of 0-2, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid, and

(B) a photoacid generator,

wherein the resin does not comprise an aromatic ring.

- (Original) The radiation-sensitive resin composition according to claim 1, further comprising (C) an acid diffusion controller.
  - 10. (Currently Amended) A radiation-sensitive resin composition comprising:
- (A) a resin which comprises a recurring unit (1-1) shown by the following formula (1-1):

Non-Final Amendment filed on May 27, 2008

Page 9 of 17

$$CH_2$$
 $CH_2$ 
 $CH_2$ 
 $CH_3$ 
 $CH_4$ 
 $CH_2$ 
 $CH_4$ 
 $CH_5$ 
 $CH_5$ 
 $CH_6$ 
 $CH_7$ 
 $CH_7$ 

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid,

- (B) a photoacid generator, and
- (C) an acid diffusion controller,

wherein the resin does not comprise an aromatic ring.

- 11. (Currently Amended) A radiation-sensitive resin composition comprising:
- (A) a resin which comprises a recurring unit (1-1) shown by the following formula (1-1):

Non-Final Amendment filed on May 27, 2008

Page 10 of 17

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is 1 or 2, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid, and

- (B) a photoacid generator, wherein the resin does not comprise an aromatic ring.
- (Previously Presented) The radiation-sensitive resin composition according to
   Claim 11, wherein n is 1,1 is 1, each X<sub>1</sub> is H and each X<sub>2</sub> is CF<sub>3</sub>.
  - 13. (New) A radiation-sensitive resin composition comprising:
- (A) a copolymer resin which comprises a recurring unit (1-1) shown by the following formula (1-1) and one or more other recurring units:

Non-Final Amendment filed on May 27, 2008

Page 11 of 17

wherein  $R_{1a}$  represents a hydrogen atom, a methyl group, a hydroxyalkyl group having 1-4 carbon atoms, or a perfluoroalkyl group having 1-4 carbon atoms,  $X_1$  and  $X_2$  individually represent a hydrogen atom, a fluorine atom, an alkyl group having 1-4 carbon atoms, or a fluoroalkyl group having 1-4 carbon atoms, 1 is an integer of 0-5, and n is an integer of 0-2, the resin being insoluble or scarcely soluble in alkali, but becoming alkali soluble by the action of an acid, and

- (B) a photoacid generator.
- 14. (New) The radiation-sensitive resin composition of Claim 13, wherein the resin (A) comprises a recurring unit (1-2) shown by the following formula (1-2):

$$\begin{array}{c}
\begin{array}{c}
\begin{array}{c}
R_{1b} \\
\end{array} \\
CH_2 \\
C \\
\end{array} \\
\begin{array}{c}
R_{1c} \\
R_{1c} \\
\end{array} \\
R_{1c}$$
(I-2)

Non-Final Amendment filed on May 27, 2008

Page 12 of 17

wherein R<sub>1b</sub> represents a hydrogen atom or a methyl group, R<sub>1c</sub> individually represents a

monovalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative

thereof, or a linear or branched alkyl group having 1-4 carbon atoms, provided that (1) at

least one of the R<sub>1c</sub> groups is a monovalent alicyclic hydrocarbon group having 4-20

carbon atoms, or (2) any two of the R<sub>1c</sub> groups form, in combination and together with

the carbon atom with which these groups bond, a divalent alicyclic hydrocarbon group

having 4-20 carbon atoms or a derivative thereof, with the other R<sub>1c</sub> group being a

monovalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative

thereof, or a linear or branched alkyl group having 1-4 carbon atoms.

15. (New) The radiation sensitive resin composition according to Claim 14,

wherein the group  $-C(R_{1c})_3$  in the formula (I-2) is an alkylcycloalkyl group.

16. (New) The radiation-sensitive resin composition of Claim 13, wherein the

content of the recurring unit (1-1) in the resin is 10-80 mol% in 100 mol% of the total

recurring units forming the resin.

17. (New) The radiation-sensitive resin composition of Claim 13, wherein the

content of the recurring unit (1-1) in the resin is 10-50 mol% in 100 mol% of the total

recurring units forming the resin.

18. (New) The radiation-sensitive resin composition of Claim 13, wherein the

resin (A) comprises a recurring unit (1-3) shown by the following formula (I-3):

Non-Final Amendment filed on May 27, 2008

Page 13 of 17

wherein R<sub>1b</sub> represents a hydrogen atom or a methyl group.

- (New) The radiation-sensitive resin composition of Claim 13, further comprising (C) an acid diffusion controller.
- (New) The radiation-sensitive resin composition according to Claim 13, wherein in formula (I-1) n is 1, 1 is 1, each X<sub>1</sub> is H and each X<sub>2</sub> is CF<sub>3</sub>.